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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/751,102      | 01/05/2004  | Ingo Ferber          | Q-79218             | 1345             |

23373 7590 04/26/2007  
SUGHRUE MION, PLLC  
2100 PENNSYLVANIA AVENUE, N.W.  
SUITE 800  
WASHINGTON, DC 20037

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| EXAMINER |
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SELLMAN, CACHET I

|          |              |
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| ART UNIT | PAPER NUMBER |
|----------|--------------|

1762

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS                               | 04/26/2007 | PAPER         |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|                              |                                      |                                      |  |
|------------------------------|--------------------------------------|--------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/751,102 | <b>Applicant(s)</b><br>FERBER ET AL. |  |
|                              | <b>Examiner</b><br>Cachet I. Sellman | <b>Art Unit</b><br>1762              |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 15-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-22 and 24-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/18/2007 has been entered.

### ***Response to Arguments***

2. Applicant's arguments filed 3/8/2007 have been fully considered but they are not persuasive. The applicant argues that the valve of Collin et al. is not directly at the dispensing device and does not teach that the glue pressure should change during a gluing cycle. However the valve (14) of Collin et al. is directly at the dispensing device meeting that limitation. In response to the argument of not controlling the glue pressure during a gluing cycle, the claim 15 does not require that the glue pressure is regulated during a gluing cycle, it only requires that the glue pressure is regulatable not when. The valve 14 cuts on and off the glue pressure based on the substrate moving to a position where glue is desired for example, the valve controls the glue to have a pressure when it is open and controls the glue to have zero pressure when it is closed there the valve regulates a glue pressure. The applicant is referencing valve 13 which is not the valve used to reject claim 15.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collin et al. (US 2002/0022080 A1).

Collin et al. teaches a process for applying glue to successive objects such as blanks that are used for packs (abstract) that are conveyed in cycles [0030]. The process comprised the steps of applying glue to the blanks using a glue assembly (9) that is equipped with glue nozzles (16), which have closeable nozzle openings and are supplied with glue under glue pressure, which is regulated by the conveying speed of the packaging material (abstract). The glue is fed by a glue pump (12) through a glue line to a glue assembly (9) equipped with nozzles (16); the glue pressure is regulated by a pressure control valve (14) disposed in the glue line directly at the glue assembly. The valve 14 meets the limitation of a pressure control valve because it regulates the glue pressure in the region of the glue nozzles. The valve cuts on and off the glue pressure based on the substrate moving to a position where glue is desired – i.e., the valve 14 controls the glue to have a pressure in the nozzles when it is actuated to be open, and controls the glue to have zero pressure in the nozzle when it is closed. The control valve is connected via control lines to a common machine control unit (17) which has sensors

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which monitor the acceleration, deceleration, movements, and periods of standstill of the conveyor [0036] therefore the valve is regulated in accordance with the conveyor speed.

Collin et al. does not teach that the control programs for different glue shapes based on the type and/or size of the blanks or corresponding sections are stored in the machine control unit or that the programs are called up by a PC as required by **claims 15 and 16**. However, it would have been obvious to one having ordinary skill in the art that a connection to a PC that is controlled by a plant engineer is needed in order to input variables (control programs) into the control systems such as the size and shapes of the substrates, the desired size and thickness of the deposited glue, the characteristics of the particular adhesive used, etc. in order to determine the desired control program for the control unit.

Collin et al. does not teach the specific type of valve used as required by **claim 17**. However, it is well known that some valve may be actuated by compressed air. It would have been obvious for a design engineer having ordinary skill in the art to have used a valve controlled by compressed air, and thus the control unit would control the compressed air via a control line, with the expectation of successful results since air actuated valves are known in the art.

Collin et al. does not teach that the different glue regions of the packaging material on one hand and arranged offset to the latter, having different layer thicknesses which are regulated by the pressure control valve according to the settings at the machine control unit as required by **claim 18**. However, Collin et al. teaches that the

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opening and closing of the valve is determined to guarantee application of patches having "a predetermined (requisite) quantity of adhesive", or mass of the spot [0037]. Therefore, Collin et al. teaches that the amount (thickness) of each adhesive patch is predetermined. It would have been obvious to one having ordinary skill in the art that the layer thicknesses of different regions/patches may be different.

5. Claims 15-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Estelle et al. (US 6517891 B1 ) in view of Heide (US 2001/0018818 A1).

Estelle et al. discloses a process that is used to deposit a fluid such as hot melt adhesives (col. 1, lines 6-9) to a substrate. The process comprises using a glue assembly that has glue nozzles (24) that are closeable that are supplied with glue under pressure (abstract). The pressure is regulated by the conveying speed of the substrate (abstract). The adhesive is fed by a glue pump (52) through a glue line to the nozzles; the glue pressure in the region of the nozzles is regulated by a pressure control valve (50) disposed directly at the glue assembly. The pressure valve is connected by control lines to a common machine unit (42) for the purpose of regulating the valve in accordance with the conveying speed (col. 5, lines 1-20). Estelle teaches the importance of consistent application of adhesive in packaging and plastics industries (col. 1, lines 13-17) because inconsistency can result in unusable and scrap product and increases cost (col. 1, lines 17-20).

Estelle et al. does not disclose that the process is used to dispense glue onto packaging material or that the program comes from the machine control unit by a PC as required by **claim 15**.

Heide discloses a process for applying adhesive to selected portions of successive blanks of series of moving blanks that can be used for packets of cigarettes (abstract). The flow of adhesive to the specific part of the blank is controlled by a valve, which regulates the flow of adhesive from the nozzle, similar to Estelle et al. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the process of Estelle et al. to be used to dispense adhesive to blanks used in packaging as taught by Heide. One would have been motivated to do so because both disclose processes for dispensing adhesive to a substrate and both references disclose the importance of dispensing adhesive to a substrate used for packaging consistently, as well as the importance of applying the adhesive to the correct areas of the blank.

Estelle et al. does not specifically teach that the glue pressure is adjusted by a PC connected to the system control. However, Estelle et al. teaches that a user interface is provided with the system control. It would have been obvious to one having ordinary skill in the art to have provided input via a PC, in order to input variables into the control system such as size and shape of the substrates, the desired size and thickness of the deposited glue, the characteristics of the particular adhesive used, etc. in order to determine the desired control program for the control unit.

Estelle et al. does not teach the specific type of valve as required by **claim 17**.

However, it is well known in the art that some valves may be actuated by compressed air. It would have been obvious to one having ordinary skill in the art to have used a valve actuable by compressed air, and thus the control unit would control

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the compressed air via a control line, with the expectation of successful results since air-actuated valves are known in the art.

Estelle et al. teaches that he metering pump dispenses the volume of fluid supplied to the dispensing valve. Estelle et al. does not teach that different regions of the packaging material have different layer thicknesses as required by **claims 18 and 21**. However, it would have been obvious to one having ordinary skill in the art that larger or smaller thicknesses may be achieved by controlling the pump and valve based upon the speed of the substrate with the expectation of successful results.

Estelle et al. teaches the use of a conveyor feedback device 34 for sensing the speed of the conveyor. However, Estelle et al. fails to teach the specifics of the feedback device including the type of sensor used e specifics of the feedback device including the type of sensor used as required by **claim 22**. It would have been obvious to one having ordinary skill in the art to have used any known conveyor speed scanning device as conveyor feedback device 34, including the claimed resolver, to sense the speed of the conveyor with the expectation of successful results since Estelle et al. is not limited as to means for providing conveyor speed feedback.

Estelle et al. teaches that the control unit has a program which controls the timing and duration for the opening and closing of the nozzles by regulating the valves (col. 5, lines 22-43) as required by **claim 24**.

Heide discloses that each blank received three patches or strips of films of adhesive. One of these strips can serve to bond a flap at one end of the carton, the other strip bonds a flap at the other end of the carton, and the third strip contains



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adhesive for the longitudinally extending flap which separately bonds the cover of the carton to a front wall of the latter [0038]. Heide discloses the importance of correctly placing the adhesive to the blanks in order to avoid applying adhesive film to parts of the blank that should not receive adhesive which results in bonding parts of the blank that are not to be bonded together and failure to bond parts that are to be bonded together. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the process of Estelle et al. to include applying adhesive to specific areas of cigarette pack blanks, such as those claimed, as taught by Heide because Heide discloses the importance of applying adhesive to certain parts of a blank in order to ensure proper bonding to form a carton.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cachet I. Sellman whose telephone number is 571-272-0691. The examiner can normally be reached on Monday through Friday, 7:00 - 4:30pm.

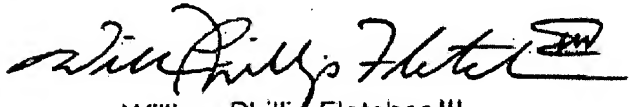
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Cachet I Sellman  
Examiner  
Art Unit 1762

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A handwritten signature in black ink, appearing to read "William Phillip Fletcher III". The signature is stylized with a large, sweeping "W" and a distinct "F".

William Phillip Fletcher III  
Primary Examiner  
Art Unit 1762